HO! THEY BROUGHT THE WATER TO LOS ANGELES on Belfast Ireland. 1. William Mulholland born 1855. 1877 --- arrives in Los Angeles. The ditch tender studies engineering at night. The fountain at Los Feliz and Riverside. 1886 --- becomes superintendent of newly formed Los Angeles Water Dept. (later the D.W.P.). 2. 1892 --- Fred Eaton proposes aqueduct from Owens Valley. Mulholland's reaction, 1904---Mulholland changes his mind. The trip by buckboard. 3. The city fathers are convinced. Land purchases in Owens Valley. Help from Gifford Pinchot and President Theodore Roosevelt. 4. Mulholland's instructions to his foremen, Description of Mulholland 5. 1908---construction begins: 160 miles of canal, 60 miles of tunnels. 12 miles of "siphon." 4500 men and 16,000 mules. Hydroelectric power. 6. The tractor demonstration. Mulholland names the tractors. Tractors for the aqueduct. 7. The "caterpillars" go to war. Churchill. Tanks and "land submarines." 8. Cement for the aqueduct. Earthen dams. Mulholland inspects a dam. A big error of omission. 9. Work in the tunnels, Records in tunnel advance and safety. New mining machinery. The cave-in. 10. Problems in the desert. The strikes. Food in the desert. 11. 1913 --- aqueduct completed. Honors for Mulholland. Desert mystery. 12. Mulholland and the Panama Canal. 13. 1923: Mulholland and the Colorado River. 14. 1928 -- the St. Francis Dam fails. 1935 -- Mulholland dies. 15. 1962 --- second Owens River aqueduct. Present water supply of L.A.

D. San Francisco Crowley Lake NEVADA · Bakerskipld · Mojave santa Clara R. Ventura -os Angeles Parker Dam

The Accomplishments of William Mulholland

- 1. Built the Los Angeles Aqueduct, the first major construction project in the U.S. to be completed within the estimated time and cost.
- 2. First engineer in U.S. to use old Roman method of making cement.
- 3. First engineer in the world to use caterpillar tractors.
- 4. First engineer in U.S. to make major use of electric power on large construction.
- 5. A world-acclaimed expert and consultant in water supply.
- 6. A world acclaimed expert and consultant on the building of earth dams.
- 7. First U.S. engineer to use the forerunners of modern mining and tunneling machinery.
 - 8. The engineer who introduced many modern practices relating to safety in construction.
 - 9. The engineer whose method of moving rock material by sluicing solved a major problem in the building of the Panama Canal.
- 10. The engineer who conceived, and did the preliminary work for, the Colorado River Aqueduct, still regarded by many as one of the seven wonders of engineering of the modern world,
- 11. The engineer whose methods of construction became models for large construction projects all over the world.